

Amendments to the Claims

Claims 1-27 (canceled).

28. (currently amended) An improved process for the dimerization of an alpha substituted styrene wherein the improvement comprises contacting said alpha substituted styrene with a catalytic porous microcomposite comprising perfluorinated ion-exchange polymer with pendant sulfonic and/or carboxylic acid groups entrapped within and highly dispersed throughout a network of metal oxide, wherein the weight percentage of perfluorinated ion-exchange polymer in the microcomposite is from about 0.1 to about 90 percent, and wherein the size of the pores in the microcomposite is about 1 nm to about 75 nm, ~~and wherein the microcomposite optionally further comprises pores having a size in the range of about 75 nm to about 1000 nm.~~

29. (original) The process of Claim 28 wherein the alpha substituted styrene is alpha methyl styrene.

30. (original) The process of Claim 28 wherein the perfluorinated ion-exchange polymer contains pendant sulfonic acid groups and the metal oxide is silica, alumina, titania, germania, zirconia, alumino-silicate, zirconyl-silicate, chromic oxide and/or iron oxide.

31. (currently amended) The process of Claim ~~30~~ 57 wherein the metal oxide is silica ~~and said microcomposite further comprises pores having a size in the range of about 75 nm to about 1000 nm.~~

Claims 32-56 (canceled).

57. (new) The process of Claim 28 wherein the microcomposite further comprises pores having a size in the range of about 75 nm to about 1000 nm.

58. (new) The process of Claim 31 wherein the perfluorinated ion-exchange polymer has about 6.3 tetrafluoroethylene molecules for every perfluoro(3,6-dioxa-4-methyl-7-octenesulfonyl fluoride) molecule and has an equivalent weight of about 1070.